L6 ANSWER 1 OF 14 CAPLUS COPYRIGHT 2008 ACS on STN

II Stability of Ogamma 100, a natural interferon pharmaceutical

AB .gamma.-Interferon in the form of a freeze-

dried injectable prepn. (Ogamma 100) had an amino

acid sequence of human .gamma.-interferon and

was stable for .gtoreq.8 wk at room temp. under white fluorescent light, for .gtoreq.36 mo at 25.degree. in the dark. Upon dissoln. together with

albumins and sucrose in distd. water, the .gamma.-

interferon remained stable for .gtoreq.3 days at room temp.

Combination of the prepn. with 1 % procaine.cntdot.HCl injection or 1 % lidocaine injection did not cause changes in soly., pH, activity, and

osmotic pressure.

ACCESSION NUMBER: 1997:497606 CAPLUS DOCUMENT NUMBER: 127:140449

ORIGINAL REFERENCE NO.: 127:26997a,27000a

TITLE: Stability of Ogamma 100, a natural interferon

pharmaceutical

AUTHOR(S): Takeshita, Yoshiyuki; Takasugi, Masumitsu

CORPORATE SOURCE: Technical Div., Otsuka Pharmaceutical Co., Ltd., Japan

SOURCE: Kagaku Ryoho no Ryoiki (1997), 13(7), 1361-1364 CODEN: KRRYEI; ISSN: 0913-2384

PUBLISHER: Ivaku Janarusha

DOCUMENT TYPE: Journal LANGUAGE: Japanese

L6 ANSWER 2 OF 14 CAPLUS COPYRIGHT 2008 ACS on STN

TI Stable .gamma.-interferon composition.

AB A frozen or lyophilized human .gamma.-

interferon compn. in the substantial absence of inorg. salt,

contains a monoamino aliph. amino acid. The human .

gamma.-interferon includes natural interferon

and interferon obtained by recombinant DNA technol. Thus, 0.5 mL aq.

soln. contg. 15 mg glycine was added to 1 mL human .gamma.-interferon soln. having a potency of 2.4 .times. 106 IU/mL and

contg. 3 mg glutathione (reduced form). Then, the mixt. was

lyophilized in a vial. When the lyophilizate was reconstituted with 1 mL of distd. water for injection, the soln. was clear

and showed 100% residual potency.
ACCESSION NUMBER: 1986:485179 CAPLUS

DOCUMENT NUMBER: 105:85179

ORIGINAL REFERENCE NO.: 105:13717a,13720a

TITLE: Stable .gamma.-interferon composition.

INVENTOR(S): Akagi, Yasaburo; Miura, Yasumoto; Hoshino, Tetsuo

PATENT ASSIGNEE(S): Takeda Chemical Industries, Ltd. , Japan

SOURCE: Eur. Pat. Appl., 35 pp.

CODEN: EPXXDW

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PAT	TENT NO.			KIN	D D	ATE		API	PLICAT:	ION NO.	DATE	
EP	168008			A2	1	986	0115	EP	1985-	108409	1985070	)6
EP	168008			A3	1	986	1230					
	R: AT,	BE,	CH,	DE,	FR,	GB,	IT,	LI, LU				
WO	8600531			A1	1	986	0130	WO	1984-	JP352	1984071	LO
	W: MC											
WO	8606080			A1	1	986	1023	WO	1985-	JP190	1985041	12
	W: MC											
JP	61044826			A	1	986	0304	JP	1985-	148093	1985070	) 4

ANSWER 3 OF 14 CAPLUS COPYRIGHT 2008 ACS on STN 1.6

TI Preparation containing stabilized physiologically active substance

AB The title prepn. comprises a modified gelatin and a physiol. active substance made of a basic protein or polypeptide, i.e. .gamma .interferon, obtained from a microorganism by recombinant DNA technol. The chem. modified gelatin, used as a stabilizer, prevents a reagglutination of .gamma.-interferon so as to provide a prepn. for parenteral administration. Thus, .gamma .-interferon was dissolved in the chem. modified gelatin (principal component of Haemaccel), and the soln. was passed through a sterilization filter. The filtrate was freeze-dried

and its antiviral effect was measured. ACCESSION NUMBER: 1986:136070 CAPLUS

DOCUMENT NUMBER: 104:136070

ORIGINAL REFERENCE NO.: 104:21407a,21410a

TITLE: Preparation containing stabilized physiologically

active substance Terano, Yoshitake INVENTOR(S): PATENT ASSIGNEE(S): Suntory, Ltd., Japan Eur. Pat. Appl., 21 pp. SOURCE:

CODEN: EPXXDW DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.		DATE
EP 162332 EP 162332	A1 B1	19851127 19890719	EP 1985-105092	-	19850426
R: AT, BE, CH, JP 60228422 JP 04081573	DE, FR A B	, GB, IT, L1 19851113 19921224	I, LU, NL, SE JP 1984-84990		19840426
US 4659570 AT 44652	A T	19870421 19890815	US 1985-727261 AT 1985-105092		19850425 19850426
PRIORITY APPLN. INFO.:			JP 1984-84990 EP 1985-105092	A A	19840426 19850426

L6 ANSWER 4 OF 14 CAPLUS COPYRIGHT 2008 ACS on STN

TI Interferon solubilization with amino acids

AB Interferon is solubilized by addn. of 5 .times. 10-6 - 5 .times. 10-3 mol amino acid/106 units interferon. The amino acid may be arginine, histidine, lysine, hydroxylysine, ornithine,

glutamine, .gamma.-aminobutyric acid, .epsilon.-aminocaproic acid, or a salt of these compds. Thus, 5 mg serum albumin, 5 mg NaCl, 30 mg

arginine-HCl, and 3 .times. 106 units of .gamma.interferon were mixed with 2 mL H2O, and freeze-

dried. The product was dissolved in 5 mL H2O, held 6 h at

25.degree., and the absorbance was measured at 400 nm. The amt. of . gamma.-interferon that remained in soln. was 98%. This

solubilization may be used to facilitate the isolation and purifn. of interferon produced by recombinant DNA technol.

ACCESSION NUMBER: 1986:174635 CAPLUS DOCUMENT NUMBER: 104:174635

ORIGINAL REFERENCE NO.: 104:27549a,27552a

TITLE: Interferon solubilization with amino acids

INVENTOR(S): Kato, Yasuki; Hayakawa, Eiji; Furuya, Kunitoshi; Kondo, Akira

PATENT ASSIGNEE(S): SOURCE:

LANGUAGE:

Kyowa Hakko Kogyo Co., Ltd. , Japan Eur. Pat. Appl., 14 pp.

CODEN: EPXXDW
DOCUMENT TYPE: Patent

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 163111 EP 163111 EP 163111	A2 A3 B1	19851204 19870930 19901003	EP 1985-104849	19850422
R: DE, FR, GB, JP 60243028 JP 05058000	IT A B	19851203 19930825	JP 1984-86972	19840428
CA 1264665 US 4675183 PRIORITY APPLN. INFO.:	A1 A	19900123 19870623	CA 1985-479841 US 1985-726971 JP 1984-86972 A	19850423 19850425 19840428

L6 ANSWER 5 OF 14 CAPLUS COPYRIGHT 2008 ACS on STN

English

II Gamma interferon composition

AB Stable .gamma.-interferon (I) compns. comprise in

addn. to I at least 3 mg albumin or 5 mg of a sugar such as a mono-, or disaccharide, or sugar alc./l.times. 10-2-l.times. 10-7 units I as a stabilizer. In the stabilized compn. I is not inactivated during lyophilization of the ag. soln. contg. I and the storage stability of the dry prepn. formed by lyophilization is improved. Thus, a lyophilized prepn. contg. sucrose [57-50-1] at 10 mg/mL I which had an activity immediately before lyophilization of 100% had 96% activity after lyophilization and 90% after 6 mo storage at

room temp. compared to 32% for I without stabilizer. ACCESSION NUMBER: 1985:154791 CAPLUS

DOCUMENT NUMBER: 102:154791

ORIGINAL REFERENCE NO.: 102:24269a,24272a

TITLE: Gamma interferon composition

INVENTOR(S): Noda, Munehiro; Fujita, Takaaki; Morise, Hiroshi; Arimura, Hirofumi; Suyama, Tadakazu

PATENT ASSIGNEE(S): Green Cross Corp., Japan SOURCE: Eur. Pat. Appl., 13 pp.

CODEN: EPXXDW

DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 133767	A2	19850306	EP 1984-304992	19840723
EP 133767	A3	19861217		
EP 133767	B1	19910403		
R: BE, DE, FR,	GB, NL	, SE		
JP 60034919	A	19850222	JP 1983-143484	19830804
JP 60048933	A	19850316	JP 1983-157560	19830829
JP 06051641	В	19940706		
CA 1223207	A1	19870623	CA 1984-459960	19840730
ES 534815	A1	19850601	ES 1984-534815	19840802
PRIORITY APPLN. INFO.:			JP 1983-143484 A	19830804
			JP 1983-157560 A	19830829

Stabilized injection solutions containing nonlyophilized gamma-interferons A liq. pharmaceutical compn. comprises an effective amt. of nonlyophilized .gamma.-interferon. The compn. further includes a

buffer capable of maintaining the pH within 4-6, polyhydric sugar alcs. as stabilizer, and a nonionic detergent. The relative shelf-life for the lig. contg. 2 mg/mL .gamma.-interferon, mannitol,

and succinate buffer was 10 days as compared to 1 day for the

lyophilized formulation.

1990:62635 CAPLUS ACCESSION NUMBER: DOCUMENT NUMBER: 112:62635 ORIGINAL REFERENCE NO.: 112:10626h, 10627a

TITLE:

Stabilized injection solutions containing nonlyophilized gamma-interferons

INVENTOR(S):

Hwang-Felgner, Jiin Yu; Jones, Richard E.; Maher, James F.

PATENT ASSIGNEE(S): Genentech, Inc., USA

SOURCE: PCT Int. Appl., 15 pp. CODEN: PIXXD2

DOCUMENT TYPE: Patent. LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1 PATENT INFORMATION:

P.P	PATENT NO.				DATE	APPLICATION NO.		DATE
WC	89041			A1		WO 1988-US3883		19881101
					JP, KR, NO			
	RW:	AT, BE,	CH,	DE,		LU, NL, SE		
II	88233			A	19930818	IL 1988-88233		19881030
AU	88272	45		A	19890601	AU 1988-27245		19881101
AU	62132	7		B2	19920312			
EF	38610	6		A1	19900912	EP 1988-910211		19881101
EF	38610	6		B1	19940302			
	R: 2	AT, BE,	CH,	DE,	FR, GB, IT,	LI, LU, NL, SE		
JE	03500	882		T	19910228	JP 1988-509401		19881101
JE	27328	77		B2	19980330			
A7	10204	8		T	19940315	AT 1988-910211		19881101
ZP	88082	49		A	19900725	ZA 1988-8249		19881103
DI	28947	0		A5	19910502	DD 1988-321429		19881103
CF	13351	76		С	19950411	CA 1988-582102		19881103
US	51512	65		A	19920929	US 1990-514392		19900425
PRIORIT	Y APPLI	N. INFO	.:			US 1987-116434	A	19871103

- ANSWER 13 OF 14 USPATFULL on STN 1.6
- ΤТ MEDICAMENT ADMINISTRATION SYSTEM

A pharmaceutical formulation to be administered by a medicament administration device, which can maintain high stability of a biological active substance, is provided. In preparing the pharmaceutical formulation to be administered via mucous membrane, particularly a pharmaceutical formulation to be inhaled by utilizing a jet nebulizer, an ultrasonic nebulizer, a metered dose inhaler, or a dry powder inhaler, the adoption of the step of contacting the biological active substance with liposomes or microspheres in an aqueous medium enables the substance to be highly stabilized.

EP 1988-910211 A 19881101 WO 1988-US3883 A 19881101

ACCESSION NUMBER: TITLE: INVENTOR(S):

AB

2001:237498 USPATFULL MEDICAMENT ADMINISTRATION SYSTEM NAGATA, SHUNJI, ASHIYA-SHI, Japan KANAOKA, ERI, OSAKA-SHI, Japan

NUMBER DATE

PRIORITY INFORMATION: JP 1997-148346 19970606

DOCUMENT TYPE: Utility

FILE SEGMENT: APPLICATION

LEGAL REPRESENTATIVE: WENDEROTH LIND & PONACK, 2033 K STREET NW, SUITE 800,

WASHINGTON, DC, 20006

NUMBER OF CLAIMS: 22 EXEMPLARY CLAIM: 1

LINE COUNT: 917

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

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(FILE 'HOME' ENTERED AT 18:27:12 ON 16 AUG 2008)

FILE 'CAPLUS, MEDLINE, USPATFULL, BIOSIS' ENTERED AT 18:27:35 ON 16 AUG

1 178136 S (INTERFERON (4A) GAMMA)

L2 225 S L1 (P) ((FREEZE (3A) DR?) OR LYOPHILIZ? OR CRYODESSIC?)

L3 23 S L2 (P) (STABILIZER OR STABILISER OR (AMINO(W)ACID) OR VALINE

L4 14 S L3 NOT PD>20021231

L5 14 DUP REM L4 (0 DUPLICATES REMOVED) L6 14 FOCUS L5 1-

=> d que L3

L1 178136 SEA (INTERFERON (4A) GAMMA)

L2 225 SEA L1 (P) ((FREEZE (3A) DR?) OR LYOPHILIZ? OR CRYODESSIC?)

L3 23 SEA L2 (P) (STABILIZER OR STABILISER OR (AMINO(W) ACID) OR
VALINE OR LEUCINE OR ISOLEUCINE OR DIISOLEUCINE OR DILEUCINE

OR TRILEUCINE OR TRIISOLEUCINE)